

Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

ECONOMICS IN THE SCHOOLS.¹

Τ.

The difficult problems of education in America today are to be found, as we all know, in the secondary education. The college has blossomed into the university; the elective system, and the introduction of the new learning, has bridged the old gap which used to exist between subjects taught and the real life to be lived by the student after he has left the higher institutions of learning. There is now at least some adjustment of university education to the life which the student must live.

But, how as to the ante-college period of our education? How as to the aims and subjects taught to the mass of our youth, who may or may not go to college? Here we are on debatable territory; here are the gravest problems in our national education. It is inevitable that we should first be compelled to settle, even if roughly, the general purposes of education in these schools. Too often the discussion of requirements for entrance to college, as well as of the curricula of our secondary schools, rambles aimlessly over the relative desirability of certain subjects. To my mind, any scientific examination of the educational question demands, first, an agreement upon what effects we wish to produce on the mind of the student. After we have settled that point it would then be in order to test various studies according to their utility in producing the wished-for results.

In the higher education, I take it, we have effectually disposed of the callow conception of education as a synonym of useful information. If it means anything, education means the acquisition of mental power and grip, the power to make definite, clear-cut distinctions, and to be able to think in a subject—that is, education on its intellectual side, I mean. If so, then the subjects taught and methods used should be chosen or rejected on the test of experience as to whether or not they tend to produce these results. In the old-fashioned college curriculum it was assumed that only Latin, Greek, mathematics, and philosophy were educative; but it is clear that there are many

¹ An Address delivered before the Schoolmaster's Association of New York, February 9, 1901.

other studies which also educate. But let me say, in passing, that the old-fashioned required curriculum produced first-class qualities, because the subjects—although much maligned—were more nearly adapted to produce the true results of education than some moderns have been willing to allow. As concerns the higher education, however, we may agree on aims and methods; but in the secondary education it is not so clear that we have any very definite aims which are generally accepted.

If we have reached an approximate agreement as to the fundamental aims of the higher education, why should we not accept—in the main—the same aims for the schools? For myself, I see no reason why we should not. A broad, fundamental purpose in the secondary education—one to be emphasized as of general importance, whether the student goes to college or not — should be the cultivation of mental power and flexibility. If this be the end, what are the best means to this end? There will be differences of opinion, of course; but our differences are not so likely to arise from want of agreement as to the end, but rather as to the means by which the end is to be accomplished. As to the means to be chosen, we must expect opposing views; we cannot blink at natural differences arising from a variety of temperaments. The decision, however, must be reached, in time, from an appeal to the concrete lessons of experience. And — if I were not afraid of raising that expansive specter of modern education, pedagogical psychology—I might add that the various sides of the human mind should be kept in view; and, that subjects adapted to cut and polish the different facets should be chosen. For instance, the student's powers of observation should be educated, and natural science would be a means to that end; likewise, we wish the analytic quality and the power of discrimination to be developed, and to accomplish that we have used the teaching of the classics; also, the rudiments of logic and reasoning are highly to be desired, and these we have sought to acquire by mathematics. These are some of the rational and fundamental justifications for the present body of teaching in our schools. To all studies in the curriculum should such tests be supplied. At least, haphazard additions to the subjects taught would be barred by such a methodical system.

II.

Granting an agreement upon our educational aims, then, whether or not economics should be used in the school as a fit means to a

correct educative end depends upon its character as a disciplinary study for youth at the age of fourteen to eighteen. To this point I shall mainly address myself.

This subject is worth discussing, because in the breaking away from the old required curriculum, and the dashing freely into all available learning, which has characterized the last few decades, we are face to face with some practical questions. We are obliged to decide whether there may not be many subjects which may be interchangeably presented, provided that they are of such a kind that they give grip and power to some parts of the mind. From the student who goes out into the world of business from the high school the public asks results—flexibility of mind, accuracy, power of discrimination, at least the rudiments of thinking, and the correct use of English. From the schoolar who goes from the school into college the same general results should be asked. How are these ends to be accomplished? It is quite possible that equally good results may be produced by using different subjects as the means of bringing about the desired end. On this point let us be open-minded.

The matter of painful interest to the instructor is the quality of training possessed by the youth who turn new faces up to him from year to year. To him it is not of importance how it came about, but it is of first importance that the student should have overcome the rigidity of ignorance, should have had accuracy expected of him, and that he should not be bewildered by the simplest attempt to use his mind naturally in reasoning on plain facts. It has been my fortune to act as an instructor in three universities, Harvard, Cornell, and Chicago; one in New England, one in the Middle States, and one in the so-called West. In my experience, one of the strongest indictments of our schools, and of the quality of their teaching, is the evident panic of a student when asked to leave the safe shore of his books and to strike out into thinking for himself. The inability to take a new idea, different from that which habit has imposed on him, proves that some slight flexibility of mind — the necessary precursor of culture — is painfully rare. Judging from results, the present curricula of the schools cannot be regarded as sacerdotal. There is no reason, merely on the ground that the present results are satisfactory, why other subjects should not be tried.

But I am not unmindful of the great difficulty staring one in the face in this discussion, one which makes inferences from experience

very dangerous. I mean that, no matter what the subjects taught, the results will be good or bad accordingly as the teacher is, or is not, fit for his work. With almost any curriculum, a good teacher will produce good results. Indeed, it would not be going too far to say that the lack of training shown by students who come up from the schools (as well as graduates of many colleges) is due to the absence of good teaching. They have worked hard, gone through all "the motions," and yet are undisciplined. Therefore, in dealing with economics in the schools, it must be assumed, in arguing fairly, that its teaching should be good. The mere fact that as now taught, it may be taught badly, is true of other things than economics. To state the case fairly, the results of good teaching in economics should be compared with the results of good teaching in other studies. A decision should not be based on the present lack of good economic teaching; we must include a possibility of better teachers in the future. Hence it would not seem to me conclusive in the matter to rule out economics from the schools because in fact poor teachers might mistakenly puff up the student with a false estimate of his economic training. A good teacher would be the very one to emphasize the slightness of the school training compared with what might be had from a fuller course. To oppose economics in the schools on the ground of ill-judged teaching and half-baked convictions is like ruling out potatoes from our dietary because potatoes are sometimes rotten.

It would be short-sighted, however, to pass by this question of the teacher of economics without recording its gravity. To be sure, really good teaching in any branch is rare; but it is especially rare in economics—chiefly, I think, because the teacher has given but slight preparation to his subject in schools where he is obliged to teach many other things, and also because the genuine economist, like the chemist, nascitur, non fit. Perfunctory teaching can be got out of any clever person to whom a fairly good text-book is given; but this process, so common in these days, is fatal to legitimate results in teaching economics. There is no part of our work which requires a wider mastery of the whole field, or in which the teaching is more difficult, than in elementary economics. The schools, therefore, should have the best teachers to be found. Ordinarily, search will be made among the graduates of normal schools. So far as I know them, it is not possible for normal schools to fit teachers properly in economics. The libraries, to say nothing of the staff in the normal schools, are wholly insufficient. If the subject is to be introduced into high schools—as it has been very generally in the West—the teacher should be provided from graduates of our best universities, or from the doctors of these institutions. And why not? The work is worthy of the best brain and training. Why should not our doctors go into the secondary schools when advanced French scholars go into the lycées? But will our doctors enter this field? I think so. It would be entirely possible to get the pick of our young doctors, who have been admirably trained by the modern university, and who have had an acquaintance with pedagogy, to teach in the schools for a few years in the beginning of their careers. It would be to them a period of probation and experience, perhaps; but for the young a young instructor is almost always the best. He is nearer to his class, nearer to their difficulties, and has more sympathy with and appreciation of their tasks. But to get this type of teacher the public must be willing to pay living wages. This suggestion, however, does not imply that a doctor is ipso facto a good teacher; a scholar may be a bad teacher. The reason for mentioning the doctor is merely that he is the product of the only institutions which have means sufficient to properly educate teachers in economics.

It will be said, however, that the curriculum of the schools is already over-crowded, and that there is no room for new subjects like economics. There are two replies to this: (1) it is a commonplace to say that in the American schools, from the age of 10 to 18, we waste two or three years, in comparison with German schools. youth were properly taught, and if the subjects were properly arranged, there would be time enough and to spare; (2) but the matter resolves itself, after all, into a choice as to what should be taught. I do not need to say that quantity means nothing in education. student of a few things well taught may perhaps lack some useful information, but he may have that most precious of all things good mental habits and intellectual power. The prize is not to the memory, but to an increased capacity to use the brain. Grant that the usual topics of the grammar school are required of all, economics may be as good an instrument to train the student as solid geometry or algebra, or much better than history. After a certain point is reached, it is not so much, what one studies, as how it is studied. Compare, for example, History and Economics. History well taught, by use of original sources, by introducing a personal biographical interest, by geography and illustration—at its best, lays emphasis on the memory and on useful

information. In Economics, on the other hand, principles are set forth, and exercises are given in applying them, much as in physics; and descriptive matter should be added to illustrate principles. Although it is probable that school boards are led to introduce economics in the belief that it gives useful information on questions of public import, and on the wrong theory that useful information is education, the only real basis on which the introduction can be legitimately rested is that its disciplinary power is of the highest. If it only gave useful information, even then its justification might be superior to that of history (as usually taught). Its subject-matter is probably more useful to a citizen, and remains longer with him, than most of the Greek, Roman, European, or English History commonly given in the schools. It is more useful, for instance, to know that 96 per cent. a year as interest spells fraud to a credulous depositor in a get rich-quick concern than to know when the Normans conquered England. But the case for economics does not rest on this comparison, favorable as that may be. In my judgment, the essential gain from the study of economics arises from abandoning studies of the memory, and temptations to cramming, and getting into a work in which pupils are obliged to apply principles to everyday affairs, and in which their intellectual machinery is forced to work. Even after much time devoted to history, the greater part of the facts will have faded from the memory a few years later; but, after a period of economic drill, the mental process will have given the student a more active and flexible mind, which never leaves him.

Perhaps, it may be said that the pupil is too young to get this kind of gain; that at his age he can be expected only to memorize the mechanical inflections of a language, or accumulate facts, on which no reasoning is required. Even if such a discouraging position were ever seriously held, it would be belied by the patent fact that our youth finish (or should finish) their algebra at the age of fourteen; and the elements of political economy are certainly no harder than algebra (if as hard).

If, however, economics be suggested as a means of adapting the schools to the demands of the public, there may be given to it an association of lowering the standard. Nothing can be more fatal to our school system than the evident purpose in some quarters to lower the requirements because the public regard them as difficult. A high standard, on the contrary, is the best worldly wisdom. Now—no

matter what the stimulating cause may have been — let us suppose that the public show an unmistakable demand for economic teaching in the schools, should the demand be granted? I say, unequivocally, yes. It may be asked for only on low commercial grounds, as a means to better revenue; but the happy fact remains that, no matter what the impelling motive, a student cannot get a mastery of it, without acquiring discipline of a high quality. That is a saving grace of economics in these days of commercialism Then, if the people show a desire to cross the chasm from ignorance to education, because of a liking for the practical character of economics, must you require them to cross only on one kind of bridge—that which has happened to survive the past? If there are several bridges, equally good, it makes no difference in the end which one is taken. If the economic bridge is attractive (and you know well it is strong and safe), while other ways are forbidding, why not be glad to let the public take that path to improved mental health. If an invalid got tired of the routine diet, and showed a craving for a new article of food, a good nurse would regard that as an opportunity to tempt the patient back to strength. The only hesitation would arise from questionings as to whether the new article would be digestible and suited to the patient's condition.

At this point, doubtless, some more convincing proof may be demanded than a personal opinion of mine that economics is a desirable training instrument for schools. In physics you give a student the law of the lever and fulcrum, or of falling bodies, as the case may be, and examples are set to which these laws apply; so in economics, general principles are expounded, the pupil is practiced in applying them to everyday facts; and this process is continued until the principles are assimilated into the thinking. Better than that, the student is daily drilled in expressing himself in stating these principles orally and in writing, and in discussing problems to which they apply; this cultivates relevancy, exactness, and the beginnings of orderly thinking. In being obliged to distinguish accurately between principles, he learns discrimination; the orderliness of mind and discrimination, in addition, improve his English; and he is obliged to reason for himself whenever he passes from principles to the facts of life. Let me take a simple instance. The principle of the increase of capital is dependent on two combined causes: (a) the fund from which savings can be made; and (b) the strength of the power to set the future gain above a present indulgence. Then the student might be asked why more capital is saved in the United States than in Haiti. At once he must raise the question as to the greater productivity of our country over Haiti, its racial advantages, the efficiency of labor, the influence of climate, etc., etc.; then, in connecting a future gain with a present sacrifice, he sees that self-mastery and prudence may cause more to be saved from a thin soil like that of New England than from the rich soil of Haiti, and the causes are not far to seek. As a consequence he can be interested in a principle which applies to the slums of an American city as well as to Haiti or to New England.

These fundamental and accepted principles are not difficult to grasp; it is only the ill-trained, or shallow, teacher who confuses the student, because he himself is confused. Certainly the principles are no more difficult of apprehension than those of physics or algebra. Some good people, to be sure, see that a complex economic question of the day is hard to solve; and they conclude that such things are too big for the schools. Of course, some economic problems are hard; but it would be equally difficult to understand without previous training the compound engines of the battleship Oregon. And yet we teach our youth in the schools the elements of thermodynamics; and later, when he knows something of the laws of gases, the means of transmitting force, etc., he comes to understand the working of a steamengine, its power, its dangers, and how to manage it. So, also, of economics. Beginning with elementary principles, we can go on to explain what to the untaught seems intricate and insoluble. beginning with simple things, he does not escape the discipline. The training in applying principles to facts is the best of all exercises for stimulating the mind to act for itself and to act rationally, instead of emotionally. The student early gets the habit of ceasing to guess at a solution, and of reflecting on the principle which may govern phenomena of certain kinds. When we have started that process, we have gone a long and hopeful way toward educating the student correctly. To break up the dread of thinking for oneself is an achievement of high distinction in education. For it we ought to have an educational Victoria cross.

One word might be spoken here against a possible objection. The character and difficulty of economics may have been regarded as unsuitable for the schools because a distinction may not always have been made between two radically different things: between the method

of discovery and the method of instruction. The elaborate statistical and deductive processes by which economic principles have been arrived at in the course of centuries have no more place in an exposition of the present status of the science than has the ephemeris of Mars in elementary geography. Historical data, needed in discovery, have little or no place in the instruction of discovered principles. No matter how difficult the process of discovery, the process of imparting results may be and is very simple.

In this very brief and crude way some idea may have been obtained of the nature of economics as an instrument for training, and of the qualities of mind which it calls into play. To apply principles to facts is no different in kind from applying legal precedents to particular cases; that is, economic training gives the same kind of discipline which is obtained in the study of the law. On its tonic influence upon the mind of the student, and not on the nature of its useful information, I should mainly base the right of economics to be taught in the schools—a right quite equal to that of many things in the present curriculum.

But the case for economics is even stronger than this. we may, the choice of subjects to be taught in our schools, at least for students who do not go to college, is influenced by their practical utility to the student in after life. Useful information is, as has been often repeated, not education; but if it should so happen that a subject which may have been admitted to our curriculum as a valuable training instrument, should, in addition, provide rules of guidance of vital interest to our social and industrial development, then the demand for it must certainly be insistent. If economics gives the youth of our day to understand that their wages depend chiefly on their efficiency that is, on their individual qualities—rather than on the issue of a presidential election, or on the action of the state, the utility of that knowledge will be of far greater value to the community than the conquest of Sicily by the Normans, or even a delightful familiarity with Walter Scott. Not that I would speak lightly of history or literature; but, to illustrate further, if the student knew the simple principle of population he would read a new interest into the Teutonic invasion of Europe or into emigration into the United States.

III

After having thus stated the value of economics to the schools, it may now be possible to explain what sort of so-called economics should

not be introduced into the curriculum. If the foregoing brief exposition has any truth at all, its force would tend to favor only that kind of work which avoids the cultivation of the memory, and which stirs the mind into flexible action and induces some attempts at fresh and individual thinking. If this view be accepted, then it will dispose of the proposition to make of economics mainly industrial history, or descriptive economics. Just in proportion as this should be done, the essential educative quality would drop out of it, and it would be better not to introduce at all such added material for cramming. But some good men strenuously advocate a strong infusion of industrial history into elementary teaching of economics. In my humble opinion this is all wrong, and for a good and sufficient reason. Such pabulum shortens the space and time given to assimilating principles; it is not usually co-ordinated and it is not relevant to the real training sought for. The result is that the student's attention is drawn away from the picture to the frame - to his serious loss. Industrial history, presentday facts, have a high value, if not introduced for their own sake, but as material illustrative of economic principles, or as data on which to practice the student's knowledge of principles. This, I well know, is not the opinion of many teachers and writers of text-books. insistence on descriptive material, however is a distant echo of the old discussion on inductive and deductive methods. But the method of discovery has no bearing whatever on the best system of imparting that which has already been discovered. One reason, moreover, why a tendency exists among teachers of economics in the schools to emphasize industrial history, and thereby reduce the teaching of economic principles to a minimum, is that the former is more easily "got up," while the latter requires a severe course of training.

In the second place economics should not be diverted into sociology. If you wish a horse, buy a horse; but do not buy an automobile under the name of a horse. The study should be one thing, or another, not a mixture, which is neither "fish, flesh, nor fowl, nor good red herring." The present popularity of so-called "sociological" topics (which to the dismay of scientific inquirers includes everything from sanitary plumbing to the philosophy of the universe) is due to the wave of altruism and philanthropy which has been the marked characteristic of the close of the nineteenth century. This altruism is a fine development; and in its desire to reform what is wrong we all welcome it most cordially. But that is by no means a reason for favoring its study in

the schools. On the other hand, there are good reasons why it should not find a place in the schools: (1) No body of principles, such as forms the essential characteristic of economics, has yet been gained in sociology which could be used as a training instrument. Today the sociologists are mainly engaged on methodology. In college and university work, it is agreed that sociology should not be studied until after a careful grounding in political science, ethics, law, and economics. A fortiori, loose vague, generalizations, difficult of precise statement, and as various as the men who make them, would tend to create half-baked egotists of pupils in the schools. (2) Ethical discussions, moreover, have no such accepted form that agreement upon them is possible. In almost all cases the ethical basis is likely to be the individual author's personal view of what he thinks is just or unjust, right or wrong. While this material may be admissible in a summer school of philosophy, there is no place for it in the schools.

In brief, then, the schools should not introduce economic history as a load to the memory of a student, nor puzzle him with the unsettled conclusions of a subject like sociology. Efforts to introduce these things under the name of Political Economy should be steadily resisted. Too often, the object in introducing them is to use the schools as a propaganda for personal views on social questions of the day.

Perhaps it might be asked of me—is there any accepted body of economic principles? There is constant evidence, it may be said, of differences between the doctors. To this I might reply that, in any science, in which there is not active and keen discussion upon results, and even upon the very foundations of the subject, conditions are unhealthy. Intellectual ferment is itself the very best means of preventing any teacher from presenting dead and obsolete material. It is no indictment against botany, or biology, that new thinking forces a restatement of principles. So far as I can see, there is as great an agreement on a very considerable body of principles, in economics, as in botany, or in other parts of biology. A German, a French, an Italian, or American general text-book today would, of course, have the distinguishing marks of the country and of the author; but in all of them you would find much the same essential statement of accepted principles. would be general agreement upon the fundamental laws of production, such as labor, land, and capital (with some variations as to the latter). Under exchange, while there would be some differences as to the theory of value, there would be a considerable body of accepted doctrine dealing

with expenses and cost of production, money, international trade, foreign exchange, and banking. And in spite of the active discussions of distribution, there is not a little agreement upon the economic basis of rent, wages, demand and supply, and even on monopolies and large combinations. Pantaleoni, Phillipovich, Marshall and Hadley would teach much the same general body of economic truth, while arriving differently at the results.

IV

Having discussed—perhaps inadequately—the nature of our educational aims in the schools, the disciplinary quality of economics, and what economics should not include, it may be in place briefly to indicate what a good teacher should try to accomplish in teaching the elementary economic principles.

- 1. Of course we must try for a teacher in the schools intelligent enough to avoid the lecture system on the one hand, and the slavery to a text-book on the other hand. Selecting certain main points he should proceed to drive home an intimate acquaintance with each. At the risk of repetition let me formulate the most desirable method as I see it. Stating the principle, stripped of all verbiage, the teacher should show its simple meaning; then he might produce some everyday facts and ask for a discussion based on the principle. After several trials orally he might give a cutting from a newspaper — usually a fallacy—and ask a careful written discussion of it in fifteen minutes. Next, the principle could be turned about in different lights; and its relations to other parts of industry mentioned. Very soon the quickest minds will begin to work admirably; and then, by imitation, the slower ones will move, stimulated by emulation. The accuracy cultivated by written exercises tests the clearness of the thinking, holds them up (like a board strapped to the back of a colonial maiden) to a definite standard, and incidentally forces the use of correct English. Errors in these papers should be marked, the best and the poorest read, and later and unexpectedly a question on the same principle should be again set. The teacher's class-book should show under a given date the question asked and the marks (known only to the instructor) on each paper. Weeks later in daily reviews a student might then be questioned on the point on which he was weak-until it gets to be known to be unsafe to neglect any portion of the subject.
 - 2. Most youths are as inert as they are allowed to be; but, also,

when once interested they begin to work of their own initiative. After a short drill with exercises such as just described they will show a liking for the process. Then the instructor can tactfully stir in them that powerful aid in future work which is especially open to use in economics—I refer to the sense of achievement. It is the thing lying behind the joy in boat sailing, the satisfaction derived from mastering a head wind, or a bad tide, by obeying certain laws working on a boat's sails and rudder, all these give the one who accomplishes his object a sense of achievement, a triumph over matter. In like fashion the economic student can easily be shown how falteringly and clumsily he worked in his first exercises; then, in a couple of months, after having shown superior flexibility under the process above explained, you will have no difficulty in showing him his gains; you can demonstrate to him how his mental grip, his insight, has grown, and the sense of achievement obtained thereby is one of the greatest internal aids to creating good intellectual form in the student.

3. As yet I have omitted one of the best aids in teaching economics. A colleague at Harvard in mathematics once bemoaned to me the lack of human interest in the elementary geometrical problems he was obliged to teach. That lack never appears in economics. The subject bristles with human interest—even more than such subjects as geography or history, to say nothing of mathematics. Not that economics should be adopted on this account; but, if it has the quality in a high degree to develop the mind, then it has the very great additional recommendation to the student in the schools that it is certain to interest him. Certain to interest him, of course, provided an incapable instructor does not make dry bones out of the living thing.

Every single topic in economics is illustrated in one form or another by events known to each student be he rich or poor. Beyond all subjects I know of it is nearest to the life each one is living; it deals with principles applying to activities to which men give more real thought than even to religion or to politics. Hence, if the student is not interested, the blame must largely fall on the teacher. There are endless ways of drawing youth on to inquiry and study, collections of graphic representations, or charts, should be furnished by publishers, just as are maps. The whole history of gold or silver can be shown by a glance; and the penetrating questions which follow from the student will be eager and natural. And so it goes. Show him a dollar bill, a half dollar, a national bank note, and you can get

the student to follow you willingly in the exposition of the principles regulating money. It is all immensely interesting—and not at all difficult. The chief requisite is a trained teacher.

What I have had to say thus far applies generally to all schools whether preparing for college or not. It should apply especially to the training of all our youth who pass directly from the school into active life—that is, to the mass of students in the schools. For those who are certain to reach college, the economic training is likely to give them grip and power to handle well their college studies, whether they ever elect college economics or not. To be sure, the fact that college work will carry farther the good training obtained in early years makes the possible omission of economics in the schools for future college students no important matter in the end. If they finally get the economic training in college they are doubtless as well off by the close of their course, so far as regards mental development, as if it were obtained earlier.

The main obstacle to success will come from the good intentions of emotional teachers who are impatient of scientific processes and of strict adherence to possibilities with a body of principles.

J. LAURENCE LAUGHLIN.

THE UNIVERSITY OF CHICAGO.